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# International Journal of Population Data Science

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## The ELAStiC (Electronic Longitudinal Alcohol Study in Communities) project

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## Objectives

The ELAStiC (Electronic Longitudinal Alcohol Study in Communities) project was established to determine factors that predict pathways into alcohol misuse and the life-course effects of alcohol use and misuse on health and well-being. This is achieved through accessing existing longitudinal data that are key sources of evidence for social and health policy, developing statistical methods and modelling techniques from a diverse range of disciplines, working with stakeholders in both policy, practice and the third sector to bring relevance to the work, and to bring together a diverse team of experts to collaborate and facilitate learning across diverse fields.

## Approach

The project will link data that include cohort studies such as; UK Biobank, ALSPAC (Avon Longitudinal Study of Parents and Children), Millennium Cohort Study, British Household Panel Survey, Understanding Society, E\_CATALYST (Caerphilly Health and Social Needs Electronic Cohort Study) and WECC (Wales Electronic Cohort for Children). These data will be linked with routine data from primary and secondary healthcare in England, Scotland and Wales. Additional data from education and police data source will also be linked as part of the project.

The main work packages for the project are:

## Methodological Innovations

Methodological developments in mechanisms for correcting bias in reporting alcohol consumption and for combining routine data

with cohort data; the application of Markov models for examining the extent to which past behaviour influences future behaviour, and econometric hedonic pricing methods for providing insights into the costs of alcohol-related harm.

## Pathways into Harm

Do family structure, household composition, youngsters's previous ill-health and educational attainment predict their use of alcohol and what socio-economic factors and household transitions contribute to hazardous alcohol consumption in adults?

## Secondary Harms

What is the effect on children's health and educational achievement of living in households in which one or more adults has experienced alcohol-related harm?

## Mental Health & Well-Being

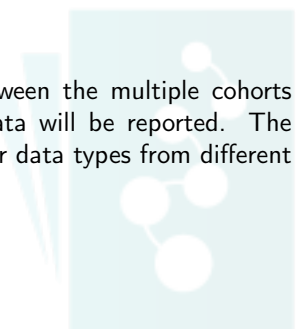
What is the relationship between alcohol consumption, hospital admission and mental health in adults and children?

## Results

The results of the data linkage between the multiple cohorts and health, education and police data will be reported. The challenges of linking cohort and other data types from different nations will be discussed.

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## Conclusion

Our project will aim to provide evidence that informs the UK Government's commitment to "radically reshape the approach to alcohol and reduce the number of people drinking to excess", by working with existing longitudinal data collected in the UK to inform policy and practice.

